DOCUMENT RESUME

ED 168 513 IR 007 010

AUTHOR Schwarz, Philip J.
TITLE Locally Generated Title Derivative Indexing in Academic and Public Libraries: A Survey of Current Practices.
PUB DATE Dec 77
NOTE 31p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Libraries; *Automatic Indexing; Costs; Information Retrieval; Information Systems; Methods; *Public Libraries
IDENTIFIERS Keyword Out of Context

ABSTRACT

A library survey to examine and analyze locally generated title derivative keyword indexing in academic and public libraries and its findings are presented. The project was organized in two phases. The first attempted to identify successful title derivative indexing programs through a literature review, correspondence with individuals known to be working with such systems, and through notices placed in professional library journals. Phase two involved study of 10 derivative indexing programs chosen to represent those institutions working with a variety of applications, those using the technique for a unique application, and those with unique computer programs. Findings indicate that title derivative indexing was prompted by failure of the local institution to provide adequate bibliographic control of the collection in question because of high acquisition rates, and long length of processing time between receipt of materials and availability to patrons. The keyword-out-of-context as opposed to keyword-in-context technique was most utilized. Problems with KWOC Title derivative indexing include inadequacy of some titles, and use of a variety of terms to describe common subjects. Non-word lists--e.g., articles, prepositions--were also employed to exclude non-descriptive terms. Index structure and format are described, along with discussions of costs, computer programs, user acceptance, and advantages and disadvantages. Appendices include a list of institutions utilizing title derivative indexing. (Author/MBR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED168513

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

LOCALLY GENERATED TITLE DERIVATIVE INDEXING IN ACADEMIC AND PUBLIC LIBRARIES: A SURVEY OF CURRENT PRACTICES

by:

Philip J. Schwarz
Special Assistant for Automation Development
University of Wisconsin - Stout
Menomonie, Wisconsin 54751

December 1977

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Philip J. Schwarz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

IR007010

ABSTRACT

The results of a study carried out under the auspices of the Council on Library Resources are described. The stated objective was to examine and analyze the role of locally generated title derivative keyword indexing in academic and public libraries with special emphasis on those institutions employing the techniques in multiple applications.

BACKGROUND

During the 1950's the first machine generated title derivative indexes were developed. The increasing use of this technique in commercial applications and by special libraries has been documented in the literature. If the literature is any indication, fewer academic and public libraries have used the technique to solve indexing problems and still fewer records exist of a single institution using title derivative indexing to assist in solving a wide variety of indexing problems.

The author first became aware of this information gap in the late 1960's when he assisted in the development of a title derivative index to Wisconsin public documents. The success of this application led to the development of twelve additional applications over a period of years. Interest in studying the use of title derivative indexing was rekindled in 1975 when the author completed a study of the role of title derivative indexing at the University of Wisconsin - Stout. As a result the author applied for, and subsequently received, a 1976 Council on Library Resources fellowship to examine the role of locally generated title derivative indexing in academic and public libraries.

METHODOLOGY

Phase 1

In the first phase of the project an attempt was made to identify successful title derivative indexing programs in academic and public libraries. This phase invloved three approaches: (1) a review of the literature with follow up correspondence to those institutions working with title derivative indexing; (2) correspondence with individuals known to be working with title derivative indexing and (3) through a notice placed in the following professional publications: Journal of Library Automation, Library Journal and Special Libraries.

This phase of the study was carried out from June 1976 through May 1977. Sixteen libraries were identified as currently producing title derivative indexes. The institutions and their applications are identifed in Appendix I. This figure does not include several cooperative ventures where the same title derivative indexing programs are used for the same application at a number of institutions.

Phase 2

The second phase of the project involved a field study of ten of the programs. Three general criteria were used in selecting institutions for visitation: (1) those working with a variety of applications; (2) those that were using the techniques for a unique application and (3) those institutions with unique computer programs.

This phase of the study was carried out during May-August of 1977. It involved interviewing one or more individuals at each institution using the survey form shown in Appendix II as a guide.

SUMMARY OF FINDINGS

Rationale

Without exception the rationale cited for undertaking title derivative or keyword indexing was the failure of the local institution, through its normal cataloging procedures or the agency issuing the material, to provide adequate bibliographic control of the collection in question. No attempt was made to discern why the issuing agency failed to provide the necessary bibliographic access. At the local level, however, several points were repeatedly mentioned. The acquisitions rate for the material in question tended to be relatively high thus precluding its incorporation into the normal cataloging procedure because of staff shortages. A second reason for not attempting to incorporate these collections into the existing system was the time lag between receipt of the material and its

availability to the patron. Most institutions already have a cataloging backlog of monographic material and the addition of more collections would only compound the problem. The time lag between receipt and availability is particularly important where scientific and technical materials are involved.

There was also evidence of a growing flustrations with the existing level of cataloging. It is not uncommon for the traditional card catalog to provide only 3 or 4 access points per document whereas augmented machine keyword indexing frequently provides between 10 and 20 access points. This is of a major concern when high use collections are involved such as reference or abstracting and indexing services, where fast access to detailed information is required.

As an aside it is interesting to note that, with few exceptions title derivative keyword indexing was undertaken by personnel one would normally classify as Public Service as opposed to the traditional source of bibliographic control eg. Technical Services.

INDEXING TECHNIQUES

With a single exception the type of indexing employed was Keyword-Out-Of-Context (KWOC) as opposed to Keyword-In-Contex (KWIC). There seems to be rather strong feelings on this subject with legibility the reason most often cited for choosing KWOC over KWIC. The wrap around title is difficult to decipher by those familiar with the system and presents an even greater problem if the tool is intended to be used by the general public.

All of the locally developed programs resulted in KWOC Indexes. On the whole they resulted in a report that was more legible than those resulting from the "canned" programs. Librarians seem to be very concerned with the historical problem of readability and have made a concerted effort to produce a highly readable and easily understood index.

Another problem often cited with the KWIC index developed by Luhn, at IBM, is the double lookup. That is, the users look in a truncated title section

(usually one line per entry) to locate what they think are the pertinent keywords. They must then look in a second location to locate the complete bibliographic description and/or the shelf location. Again most of the locally produced indexes have eliminated this problem by providing the complete entry under each keyword. Although this results in a much larger index, it seems to be less confusing and more convenient for the user.

TITLE ADEQUACY

A problem often cited with regard to title derivative indexes is the adequacy of the title. Since the index is based upon the title the quality of the index can be no better than the quality of the title.

Historically studies have shown there were considerable variations in title adequacy of documents between the technical and non-technical fields.[1] In science and engineering the titles are more apt to at least imply the contents of the article. This is not the case with the non-technical fields. This is one of the reasons why most of the major title derivative indexing projects have been undertaken in scientific, technical or highly specialized fields. As one can see by the list of applications noted in Appendix I, this is no longer the case, at least in academic libraries.

Whether-or-not the title is enriched seems to depend upon several factors: (1) The adequacy of the titles is a prime consideration. Those in the non-technical fields are more likely to require enrichment. (2) The frequency with which the collection is used also seems to be a factor. The more heavily used a collection is, the more likely enrichment will take place. (3) The priority the project is given within the creating unit is also a factor. Indexing projects receiving a relatively high priority within a unit will more likely receive title enrichment. (4) There is also a tendency for those institutions with locally developed

computer programs to engage in title enrichment.

Several approaches are used to enrich titles. One is to base the enrichment on an existing thesaurus for example: Sears, LC Subject Headings, etc. Another approach is simply to add descriptors that come to mind when looking at the document. A third, is to use the existing index as a dynamic thesaurus by looking up possible descriptors in the existing index thus creating a degree of consistancy within the index.

Regardless of whether or not title enrichment takes place almost all indexes required some form of title modification to enhance legability and reduce noise. As an example, New York would normally appear as two separate words unless it were linked to produce a continuous string of characters. In almost all cases this type of title modification was achieved at the time of data input usually by incorporating the required instructions into the data entry procedures. In only one case was this type of editing achieved through specially designed editing programs.

Title modification does present some interesting problems if one attempts to extract data from an already existing data base to perform keyword indexing on it. As an example pulling titles and subject headings from MARC tapes would result in a high level of noise in the index. That is, if you did not process the data through a series of editing programs first.

SCATTERING OF INFORMATION

The person using an index generally assumes that documents dealing with a common subject will appear together under a common subject heading. This is generally not the case with title derivative keyword indexes. Authors frequently use different terms to describe the same subject and frequently employ catchy titles with little meaning. This results in material on a subject being scattered throughout the index. An example might be an index in which

information on automobile might also be found under auto, vehicle, car, make of car and the name of manufacturers. A number of factors are involved in information scattering such as synonyms, singular and plural forms of a word, variant forms of words such as spelling variations and abbreviations, homographic words and hierarchical relationships.

The problem of information scattering in title derivative keyword indexes can be controlled to a certain degree by word or phrase regularization programs. That is, a program that brings variant forms of a word under a single heading and provides cross references from words not used to the word used.

Unfortunately, word regularization programs require a degree of sophistication not usually available in most title derivative indexing programs. The time and effort involved in developing and maintaining such a program makes its use prohibitive to most applications. This proved to be true with the applications examined in the study. In fact, few of the indexes even employed cross references. The word regularization that was done was a manual process achieved either at the editing or input stages as noted above with title modification.

NON-WORD LISTS

Non-words are words which are not descriptive of the documents being indexed. Prime examples are articles, prepositions, pronouns, conjunctions, and auxiliary verbs. The study identified two approaches to eliminating such words from the keyword listing of the final index. The most common approach is to develop a list of non-words. These are then placed in the computer and compared to each word in the title. Whenever a match occurs the program does not produce an entry under the word. A second approach is to identify the keyword in the title. The computer is then programmed to scan the title and produce entries only for words identified as keywords.

There are two divergent theories regarding the exclusion of non-words from title derivative keyword indexes. One school of thought believes that

every attempt should be made to eliminate non-words from the index. The elimination of non-words from the index serves two functions. First, it reduces noise or the number of non-descriptive words appearing in the index. In theory the elimination of non-words decreases the number of index words, thus increasing the quality of the index. A reduction of the number of entries also means the user has fewer index words to scan, thus decreasing lookup time. Second, it can be used to reduce the size of an index. The larger the non-word list the smaller the number of index words which reduce the number of entries. This is less important with indexes which limit the size of each keyword entry to one line, however, it can become significant in an index which includes the complete bibliographic description under each keyword entry.

A second school of thought believes that a small non-word list will suffice. The rationale being twofold. First, each time you exclude a word a potentially useful reference is eliminated. This is particularly important when the index is being used for title recall as opposed to strictly subject recall. Examples might be article indexes or indexes to reference materials where the user has some idea of the title but would be unable to locate the item in a title file arranged in alphabetical order. A second factor is the time required to identify and maintain large non-word lists in relation to the benefits. Generally a relatively large increase in the number of non-words results in a relatively small percentage increase in the entries eliminated from the index.

In developing a title derivative keyword index one of the major concerns of the machinists is the creation of the non-word list. The approach most commonly used is to produce an edit listing using 25-30 high frequency non-words. The index is then either visually scanned to identify additional non-words or analysis is made during the edit run to identify the frequency with which words appear. This process is usually repeated periodically as the size of the index increases.

Another question frequently encountered relates to whether or not a single keyword list should be used for all indexes. There are no consensus on this point. Several institutions used a single keyword list for all indexes while others felt that different subjects would likely have differing language patterns, thus requiring a subject-specific keyword list.

INDEX STRUCTURE AND FORMAT

As mentioned earlier the structures of the index generally depends upon whether a single or double lookup is used. In the case of the single lookup the index consists of one section arranged by keyword. All of the data pertaining to the entry usually consisting of the keyword, title, location information and perhaps additional bibliographic data appears in this section under each keyword. This is the preferred structure at least by those developing their own programs. The second approach is a double lookup consisting of a two section index. The first section arranged by keyword generally consists of the keyword, all or part of the title and a reference number. The second section is arranged by reference number and consists of the complete bibliographic entry and location information. Historically this was the approach used by Labs at IBM.

In addition to the basic structure a variety of additional reports are frequently produced from the data bases once they are built. Examples include profiles by subject, listings by type of media, and chronological listings. These are generally produced by building such information into the keyword for a reference number.

Index format generally takes four forms. The most common is a 11 X 8 ½ printout. In several cases this has been reduced to a 8 1/2 X 11 page through xerography resulting in a report that is much more easily bound and distributed. It also still stands up longer under heavy use. A third format being used is computer-output-microform (COM). Microfiche is the format most in use

applications. The use of GIS applications many of the problems associated with database, built, difficulty of distribution, high computation costs, inappropriate, GIS was used to build of the applications although will provide where information a desire to move to a alternative format. The first format is terminal display. At the present time decision support is used only as a method of data entry and editing. However, several applications are developed the capability of executing simple decision setup function logic. At the present time this approach is intended to be used only by library staff members for performing complex searches or generating custom made bibliographies. It is hoped that this capability will be extended to the user logical step needs to make decision processing of keyword data files available for the public to do themselves.

COMPLEX PROGRAMS

Approximately one third of these systems are utilizing locally developed computer programs. The most were using "canned" programs developed commercially or at other institutions. There seemed to be more experimentation taking place where locally developed programs were involved. The reason also seemed to be more easily available than those purchasing from the commercial sector.

COSTS

One area that service organizations including libraries are most for in the development of digital user networks. Generally operating cost figures were not available. Several institutions have maintained this information particularly when the project was first developed. Several other institutions were also able to establish hard work figures. These generally reflect one of the chief advantages of this distributed computing, that is, the user savings over manual indexing techniques.

USER ACCEPTANCE

The acid test of any index is whether or not it is used and the degree of difficulty in using it. Several points were examined in the survey: (1) who was using the index? (2) to what degree was it being used? and (3) to what extent was it integrated into normal library orientation? Unfortunately no formal user studies had been carried out by any of the institutions visited and it would be difficult to ascertain such data in a brief visit.

Nevertheless some generalizations can be made. Title derivative keyword indexing seems to be used first of all as a staff tool. As such it seems to be readily accepted by public service personnel and heavily used. This may reflect, in part, the fact that most of these indexes were created by public services personnel. To what extent patrons use the index is less clear. Only one institution has developed orientation packages designed to instruct patrons in the importance and use of title derivative keyword indexes. The most common orientation approach is one-on-one instruction where the reference librarian uses the index to answer a specific question and in the process instructs the patron regarding its purpose and use. Several of the libraries visited included title derivative indexes in their general orientation programs treating each index as one of many available bibliographic tools.

There is some indication in the recent literature and from onsite visits that technical service personnel are somewhat less than enthralled by the use of title derivative keyword indexing. This was not pursued but it may be one reason why more libraries are not utilizing the techniques.

RELATIONSHIP TO OTHER BIBLIOGRAPHIC TOOLS

The authors working assumption was that title derivative indexes are stand alone indexes and are generally not related to other bibliographic tools in the library. In fact, this does not seem to be the case in many instances. In a number of applications particularly where reference collections or

abstracting and indexing materials are indexed these materials are already included in the card catalog. They are "reindexed" for several reasons: (1) the inadequacy of traditional subject cataloging and (2) the intensive use this type of collection verses its relative insignificance in relation to the total amount of information in the card catalog.

A second catagory of materials are related to already existing machine readable data bases. The most common application is a title derivative keyword index to existing Serials Lists. In each case the information necessary for indexing is extracted from the existing data base and a keyword index produced. This is also true in several applications where the main data base contents are films or other non-book media. Again title information is extracted and used to produce a keyword title index. The advent of readily available MARC data bases opens up a wide range of possibilities for extracting data for keyword indexing.

A relationship also exists between locally generated keyword indexes and commercially produced indexes. The library may already own a commercially produced index to the collection but may also produce a locally generated index. There are several reasons why this is done. First, the commercial index may be totally inadequate. The Canadian and U.S. Standards are excellent examples illustrateing this point. Still another reason for reindexing is to produce an index of only those materials, from a much larger collection, owned by the library. Examples might be local indexes of state or federal documents.

ADVANTAGES AND PROBLEMS

Whether a title derivative keyword index is the solution to a particular information retrieval problem will largely be dependent upon the nature of the problem and the objectives you are attempting to acheive. The use of title derivative keyword indexes have been documented in the literature and in Appendix I. In the process of carrying out this study a number of advantages

and problems with title derivative indexing have been identified. These are noted below:

ADVANTAGES

1. One of the chief advantages is the speed with which title derivative keyword indexes can be generated. Manual indexing which might normally take months can be reduced to a matter of hours. This factor was cited by most librarians visited.

2. Title derivative indexes can be produced by the computer with little human intellectual effort, thus decreasing the time between receipt of an item and its appearance in the index and significantly lowering labor costs.

3. Cost savings was a frequently cited advantage of title derivative indexing, although most institutions visited did not maintain rigid cost controls.

4. The keyword index is produced by the computer making it possible to provide the user with a greater variety of information with less additional effort than with manual indexes. As an example, the computer can generate the keyword title index, a bibliography and an author index from one set of data. Manual preparation would require retyping the data for each section.

5. As with any computer produced report you have the possibility of easily producing multiple copies. This advantage has been put to greatest use by those utilizing COM as a distribution medium. Copies of the index are frequently found in a variety of locations in the library as well as faculty and staff offices and other libraries.

6. Users feel that the average keyword index generally supplies more points of access than does a manually produced index. This, of course, depends upon the length of the title, the type of material being indexed, the extent of the non-word list, and the number of additional descriptors supplied.

7. The production of keyword indexes is relatively simple and can be undertaken without the expertise required for manual indexing. Once the system is established, title derivative indexing is largely a clerical process.

8. Many keyword indexing programs are available free of charge from other institutions. Most librarians are willing to share their expertise with their fellow professionals.

9. The data base created for keyword indexing is easily manipulated by the computer so it can be used to produce; a current awareness tool, a SDI (Selective Dissemination of Information) listing, as well as a title derivative keyword index.

10. Keyword indexing can easily be adopted to a variety of uses without substantially altering the program. Thus, it can be applied to such diverse indexing projects as personal correspondence, major scientific indexes and library reference material.

11. Computer produced title derivative keyword indexes are consistant. They will always index the same item in the same way. This contrasts with human indexing which is more of an artform than an exact science.

12. Indexing is more likely to reflect the terminology of a given discipline as well as terminology currently in use.

13. It is very effective when utilized for indexing high use collections where users are likely to have a high degree of partial title recall. eg. reference or serials.

PROBLEMS

1. Perhaps the most frequently mentioned problem associated with keyword indexing is the inadequacy of the title. The title that is catchy rather than descriptive can not be readily retrieved unless it is enriched.

2. The need to supply additional descriptors to many titles was frequently cited as a disadvantage. In fact, a number of users are no longer producing strictly title derivative indexes because the number of access points provided by the indexer far exceeds those extracted from the title.

3. The lack of terminology control, which results in information scattering, places a greater burden on the user. The user must carry out the complex process of concept association normally done by a professional indexer.

4. Some title derivative keyword indexes lack a hierachical structure within a keyword block. Thus, as more entries are added under a given keyword, the word tends to lose its power as a discriminator. As an example, ten entries under the keyword Wisconsin would produce a useful entry. However, ten pages of entries under

Wisconsin would prove considerably less useful, unless the entries were subdivided in some manner.

5. Keyword indexes are often criticized for the amount of "noise" or "useless" entries produced. This forces the user to look through more entries before locating the one he wants. This tends to be a specious argument because all entries are useless unless the user is looking for material on the topic.

6. KWIC indexes that arbitrarily modify the title to fit within a given set of parameters results in problems of title clarity. Limiting the KWIC entry to 60 character spaces is a good example.

7. The problem of patron education was cited as a problem by several people. Patrons are frequently not familiar with title derivative indexes, how to use them and their availability.

8. In this same connection it was pointed out that a creating patron dependence upon many keyword indexes might be a diservice to the patron because such tools are not commonly found in most libraries.

Despite criticism of the keyword indexing technique, it seems to be gaining in popularity. Each new issue of Library Literature contains reports of additional activity. Apparently others are asking as Kennedy did:

> "How does the permuted product compare, not with the hand-crafted excellence, but with the average, routine output of the overburdened subject analyst working with the deficiencies of any other system? In terms of total investment per query satisfied, is permuted title indexing an efficient way of handling a large segment of retrospective searches? Is permutation indexing the cheapest and simplest way of providing all the conveniences of a printed catalog which is both up-to-date and effectively organized? These are some of the questions which merit exploration."[2]

Apparently an increasing number of institutions are answering yes to the questions raised by Kennedy. Still, title derivative keyword indexing has a long way to go to reach its full potential.

GENERAL CONCLUSIONS

1. Considering its potential, relatively few institutions are utilizing title derivative keyword indexing to meet their indexing needs. Only one public library was identified as using this technique. The reasons for this are unclear and require additional study.

2. Communications between librarians in the field is an area that requires considerable upgrading. In too many cases librarians working with title derivative keyword indexing were not aware that others were working in the same area. More librarians should consider publishing articles relating to practical applications of this indexing technique.

3. A rather surprising fact was the number of individuals in public service areas that were developing indexes. Traditionally, indexing is the responsibility of technical services staffs. The reasons for this requires further examination in more detail.

4. There is an increasing tendency to go beyond the strict confines of title derivative indexing and supplement or even supplant the title with added descriptors.

5. More libraries should consider developing cost benefit studies of the projects they undertake.

6. Additional studies need to be undertaken regarding the need for user orientation and user acceptance of title derivative indexing.

7. There is a definite trend toward on-line updating of keyword files and on-line searching of the files using Boolian Logic. Several institutions have the former capability and one has the latter. The next logical step is to provide the facilities for patron on-line searching of the files.

8. Additional thought needs to be given to the relationship between traditional bibliographic tools eg. the card catalog or commercial indexes, and locally generated keyword indexes. Their should be a link between the two as an aid to the library user.

9. The use of computer-output-microform particularly microfiche as a distribution medium was considerably more widespread than the author anticipated. Since the keyword indexes are generated by machine they are capable of being produced on COM. A number of institutions were making their keyword indexes available at multiple stations within the library and where appropriate to other institutions.

10. There is a wide gap between the technical capabilities of title derivative keyword indexing as reported in the research literature and the practical applications currently utilized in most academic and public libraries.

ACKNOWLEDGMENTS

I wish to thank:

1. The Council on Library Resources for supporting this fellowship project by paying the direct costs for travel and communications.

2. Those individuals who took time out from a busy schedule to correspond with me and provide a good learning experience while visiting their institutions.

3. The university and library administration of the University of Wisconsin - Stout who provided the released time to complete this project.

4. Those library staff members at UW - Stout who took on additional responsibilities so that I could accept the fellowship.

REFERENCES

[1] B.B. Lone, "Keywords in -- and out of -- Context," Special Libraries, 55:45 (January 1964).

[2] Robert A. Kennedy, "Mechanized Title Word Indexing of Internal Reports," Machine Indexing : Progress and Problems, (Washington, D.C., American University, 1962), p. 126.

APPENDIX I

INSTITUTIONS UTILIZING TITLE

DERIVATIVE INDEXING

INSTITUTION: Arizona State University, Library

LOCATION: Tempe, Arizona

CONTACT: Eleanor Ferrell - Reference Librarian

DATE OF VISIT: August 1977

APPLICATIONS: Arizona State Document Collection
Map Collection
Solar Energy Collection
Paolo Soleri Archive
Senator Carl Hayden Papers

DOCUMENTATION: Internal Manuals

INSTITUTION: California Institute of Technology, Library

LOCATION: Pasadena, California

CONTACT: Dona Roth - Reference Librarian

DATE OF VISIT: August 1977

APPLICATIONS: Serial Publications
Chemical Titles Index
Biochemistry Index
Chemistry Library-Catalog Supplement (no longer produced)

DOCUMENTATION: Internal Manuals

Roth, Dona. "The Caltech Science Library Catalog Supplement," Journal of Library Automation, 7:343-347, June, 1974.

INSTITUTION: California State University, Los Angeles, Library

LOCATION: Los Angeles, California

CONTACT: Ray Liebman - Serial Materials Control and Preparation

DATE OF VISIT: None

APPLICATIONS: Unpublished Education Theses

DOCUMENTATION: Liebman, Ray. "A COMIK Index to Unpublished Education Theses," Unpublished Librarian, no.10:70-71.

[redacted]: Council of Ontario Universities

[redacted]: 130 St. George Street, Toronto, Ontario

[redacted]: Dwight Drummond - Director, Office of Library Coordination

[redacted]: None

[redacted]: COBOL, Comparative Government Documents
(A computer based processing and retrieval system used by 54 Canadian and US libraries)

[redacted]: System Manuals

Provost, Candiana. "COBOL: Comparative Government Documents." College and Research Libraries, 39, January, 1978.

Majoni, Peter J., et al. "MARC and COBOL: A Case Study in Small Format Use in a University Library." Toronto: University of Toronto Library, June 1977. (photocopied)

[redacted]: Florida Atlantic University, Library

[redacted]: Boca Raton, Florida

[redacted]: Merle D. Hagelstein - Interim Director of Libraries

[redacted]: None

[redacted]: Public Documents of the State of Florida
Ocean Engineering, Technical Reports, Surveys,
Miscellaneous Topics
Collection of books, journals, reports and papers of
interest to the Gulf-Atlantic Joint Center for Urban and
Environmental Problems

[redacted]: Internal Manuals

[redacted]: Iowa State University, Library

[redacted]: Ames, Iowa

[redacted]: William Gleaton - Reference Librarian

[redacted]: June 1977

[redacted]: Iowa Nations Register Index
Family Reference Files
Map Collection
Government Documents
Manuscript Collection
Photocopying and Indexing Services

[illegible]: Brooks, William. "A Comparison-Produced Newspaper Index." Journal of Library Automation, 99-99:99, March, 1977.

Brooks, William. "An Augmented Keyword Index to Abstracting and Indexing Services." Journal of Academic Librarianship, 9:999-99, July, 1977.

[illegible]: Bellows Area Technical College, Library

[illegible]: Bellows, Minnesota

[illegible]: Jason Jefferson

[illegible]: May 1977

[illegible]:
Audio Equipment
Bookmark Making
Bookmobiles
Computer File
Correspondence Correspondence
Events and Conventions Plans

[illegible]: Jefferson, Jason. "Computer Files for Students: Bellows Area Technical College Bookmobile Crowds." Minnesota Library Bulletin, 99:999-9, May, 1976.

Jefferson, Jason. "Computer Produced Audio Guides." Paper presented at the Library Audio Equipment Conference, Minnesota, February, 1976.

[illegible]: Dunbar County Library

[illegible]: Ellsbridge, Iowa

[illegible]: Ray Dungo

[illegible]: June 1977

[illegible]: Library Audio Catalog

[illegible]: Universal Manuals

[illegible]: Jacksonville Public Library

[illegible]: Jacksonville, Jacksonville

[illegible]: Nelson Crawford

DATE OF VISIT: August 1977

APPLICATIONS: Serials

DOCUMENTATION: Internal Manuals

Crawford, Walter. "Building a Serials Keyword Index," Journal of Library Automation, 9:34-47, March, 1976.

INSTITUTION: University of Iowa, School of Library Science

LOCATION: Iowa City, Iowa

CONTACT: Carl Orgren - Assistant Professor - School of Library Science

DATE OF VISIT: June 1977

APPLICATIONS: Iowa Library Information Teletype Exchange Questions
Vertical File Materials

DOCUMENTATION: Orgren, Carl and Barbara Olson. "Statewide Teletype Reference Service," R.Q., 15:203-209, Spring, 1976.

Orgren, Carl. "Teletype Reference Service," Iowa City: University of Iowa School of Library Science, N.D. (Photocopied)

Orgren, Carl. "Library Science School Reference Service," Iowa Library Quarterly, 21:304-07, October, 1972.

INSTITUTION: University of Michigan, Library

LOCATION: Ann Arbor, Michigan

CONTACT: Mark Wilson

DATE OF VISIT: None

APPLICATIONS: Newspaper Index

DOCUMENTATION: Wilson,Mark. "Automated Indexing Project for Local Newspapers," University of Michigan Librarian, 8:1-3, January 27, 1977.

INSTITUTION: University of Minnesota - Duluth
(Lake Superior Association of College and Universities)

LOCATION: Duluth, Minnesota

CONTACT: Dr. Cy Milbrath - Professor - Department of Education

DATE OF VISIT: May 1977

APPLICATIONS: Nonbook Media Catalog

DOCUMENTATION: Internal Manuals

INSTITUTION: University of Newfoundland, Library

LOCATION: St. John's, Newfoundland

CONTACT: Marguerite Jones - Information Services Librarian

DATE OF VISIT: July 1977

APPLICATIONS: Atomic Energy of Canada - Reports
Canadian Standards
Fish and Forestry Reports
Geological Survey of Canada - Reports
International Institue for Applied Systems Analysis Reports
NTIS Reports
Ocean Engineering Information Center - Collection
Reference Collection
Statistics Canada

DOCUMENTATION: Internal Manuals

INSTITUTION: University of Toledo, Library

LOCATION Toledo, Ohio

CONTACT: Alan Hogan - Assistant Director

DATE OF VISIT: None

APPLICATIONS: Nonbook Media

DOCUMENTATION: Internal Manuals

INSTITUTION: University of Toronto, Library

LOCATION: Toronto, Canada

CONTACT: Dale Biteen

DATE OF VISIT: July 1977

APPLICATIONS: See Council of Ontario Universities

DOCUMENTATION: See Council of Ontario Universities

INSTITUTION: University of Virginia, Library

LOCATION: Charlottesville, Virginia

CONTACT: Walter Newsome - Public Documents Librarian

DATE OF VISIT: None

APPLICATIONS: Government Documents

DOCUMENTATION: Internal Manuals

INSTITUTION: University of Wisconsin - Stout, Library

LOCATION: Menomonie, Wisconsin

CONTACT: Philip Schwarz - Special Assistant for Automation Development

APPLICATIONS:
Graduate Theses
Telephone Directories
Textbooks and Curriculum Guides
Travel and Tourism File
Vertical File Materials
Wisconsin Public Documents
Nonbook Media
Reference Media
Reference Questions

DOCUMENTATION:
Schwarz, Philip. "State and Local Document Retrieval: KWOC Solution," R.Q. 11:250-2, Spring, 1972.

_____. "Keyword Indexing of Reference Materials: An Aid to Ready Reference," Mountain Plains Library Quarterly, 18:10-12, Spring, 1973

_____. "Keyword Indexing of Non-book Media," Audiovisual Instruction, 19:84-87, November, 1974.

_____. "Producing a Computerized Catalog of Media Programs," Audiovisual Instruction, 21:49-51, May, 1976.

_____ and Constance Tiffany. "Need More Ready in Your Reference?: KWOC It," R.Q. 16:39-43, Fall, 1976.

APPENDIX II

CLR FELLOWSHIP SURVEY FORM

CLR FELLOWSHIP SURVEY FORM
TITLE DERIVATIVE INDEXING

PHILIP SCHWARZ, UNIVERSITY OF WISCONSIN-STOUT, MENOMONIE, WISCONSIN 54751 (715-232-1272)

1. INSTITUTIONAL DATA:
   NAME:
   CONTACT PERSON:

2. INDEX NAME:
   2.1 FILE SIZE:

3. AVAILABILITY OF DOCUMENTATION eg. REPORTS OR ARTICLES.

4. RATIONALE FOR THE PROJECT:

5. METHODOLOGY USED IN DEVELOPING THE INDEX:

6. INDEXING TECHNIQUES EMPLOYED:
   6.1 TYPE eg. KWIC, KWOC:
   6.2 DATA AND FIELD SIZES:
   6.3 USE OF TITLE ENRICHMENT AND MODIFICATION eg. SUBJECT HEADINGS AND CHAINING:
   6.4 PROCESSING OF SCATTERED INFORMATION eg. SYNONYMS, SINGULAR AND PLURAL WORDS, VARIANT SPELLINGS, CROSS REFERENCES:
   6.5 STOP WORD LISTS eg. SIZE, METHOD OF GENERATING AND REASON FOR USING:
   6.6 STRUCTURE OF THE INDEX eg. ARRANGEMENT OF THE DATA AND SORTING SEQUENCES:

7. LIST OF THE REPORTS GENERATED FROM THE DATA BASE:

8. COMPUTER PROGRAMS: eg. SOURCE, LANGUAGE, EQUIPMENT REQUIRED AND AVAILABILITY:

9. COSTS OF DEVELOPING AND MAINTAINING THE INDEX:

10. ADVANTAGES:

11. DISADVANTAGES:

12. USER ACCEPTANCE:

13. RELATIONSHIP TO OTHER BIBLIOGRAPHIC TOOLS:

14. WHAT WOULD YOU DO DIFFERENTLY:

15. LIST OF OTHER APPLICATIONS:

16. LIST OF OTHER INSTITUTIONS USEING THIS TECHNIQUE: